

REMARKS/ARGUMENT

Entry of this amendment is respectfully requested on the grounds that applicant has not had the opportunity to address the newly applied references. Entry of this amendment is also requested on the grounds that it places the claims in better condition for appeal.

The allowance of claims 20, 25 and 27 – 29 as well as the objection to claims 9, 17, 18, 31, 37 and 40 is acknowledged.

It is the examiner's position Usami teaches arranging subshapes in a hierarchical order. The examiner points to figures 4 and 12 as well as column 2, lines 58-59, column 5, lines 19-21 and column 15, lines 21-23. Usami does not teach arranging subshapes in hierarchical order. Rather, Usami teaches arranging models of varying detail in hierarchical order.

Looking at, for example, figure 4, the "body level" indicates that body 1 and body 2 comprise the scene. Thus, body 1 and body 2 may be broadly viewed as "subshapes" which comprise the scene. However, body 1 and body 2 are not hierarchically arranged as required by the claims. Similarly, at the "part level", body 1 is comprised of part 1 and part 2, etc. Again it is seen that the parts are not hierarchically arranged. It is thus seen in figure 4 that each horizontal row comprises the scene, but there is no hierarchical arrangement within each of the rows.

In contrast, in independent claims 1, 12, 24, 30, 34 and 39, the subshapes (or subshape groups) are hierarchically arranged. For the subshapes of Usami to be hierarchically arranged, such arrangement would need to occur within the horizontal rows of figure 4. For example, at the "figure element level", the spheres, cylinders and planes comprising part 1 would need to be hierarchically arranged. Clearly they are not. The portions of Usami identified by the examiner do not teach hierarchically arranged subshapes. As to claims 32 and 36, those claims require that the searching be performed in a hierarchical manner even though the subshapes themselves may not be hierarchically arranged. In either case, the portions of Usami cited by the examiner do not stand for the proposition asserted by the examiner.

Regarding the reference to Trew, that reference does not teach the method of searching a second shape for a transformation of a subshape. Trew does not search for shapes at all. Rather, Trew uses templates (see figures 2 through 5) to find matches based on patterns of pixel

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intensity. That may be referred to as content based searching as the search is based on the content (pixel intensities) within the search area. The independent claims either contain, or have been amended to contain, a reference to searching a second shape for the subshapes to clearly define over content based types of searches.

In view of the foregoing arguments and amendments to the claims, it is respectfully submitted that all of the pending claims are now in condition for allowance. A Notice of Allowance is respectfully requested for claims 1- 9, 12, 14 - 20, 24, 25, and 27- 41.

Respectfully submitted,



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